

APPENDIX 2:
GLOSSARY
DEFINITION OF TERMS

1. INTRODUCTION

The following glossary attempts to define the majority of terms used throughout this study. This is principally intended to make the report accessible to non-specialists, but also to introduce a greater degree of comparability between the various coastal assessments commissioned by Historic Scotland. Occasionally terminology appears in the text, the use of which is not supported by this study. Generally these are definitions of structural type or function coined in earlier studies (e.g. hut, bothy or sheiling), which have ambiguous connotations. These are hard to apply with certainty during a brief assessment of this nature without supporting documentary or comparative evidence. The use of the broader terms 'building' or 'structure' is preferred, however in some cases the former terms are retained to indicate independent interpretations of particular sites or structures.

The terms are listed according to the categories used throughout the study, and generally follow the guidelines established by Historic Scotland (1996). The exceptions to these are highlighted in Vol. 1 (Section 3). Terms which are defined elsewhere in the glossary appear in *italics*.

2. HINTERLAND GEOLOGY AND COASTAL GEOMORPHOLOGY

2.1 Categories

Hinterland Geology

Peat / soil over bedrock An area of coastal hinterland characterised by a hard bedrock overlain by negligible or shallow (<2m thick) deposits, such as peat, soil or *glacial till*.

Raised beach and marine deposits A coastal hinterland landform consisting of uplifted beach and sea floor sediments created by *marine emergence*.

Blown sand Any coastal landform characterised by sand-sized sediments transported and deposited by aeolian processes. Also known as coastal dune systems.

Alluvial deposits Deposits of any grade that have been laid down by fluvial processes. The distribution of these deposits is generally restricted to river floodplains and terraces.

Coast Edge

Low edge (<5m) A low relief *coast edge* consisting of small rock outcrops and / or low angle slopes (<45°).

Cliff (>5m) A high relief *coast edge* consisting of physically upstanding rock outcrops, steep exposures of drift deposits and / or high angle vegetated slopes (>45°).

Man made barrier Any human construction forming an artificial barrier to coastal processes (e.g. harbour walls, revetments, gabions and embankments).

Storm beach A ridge of coarse beach material generally situated above *HWM* created during a past episode of exceptionally high energy wave activity. Storm beaches are generally fossil features and are frequently colonised by stable vegetation communities.

Human disturbance Any section of *coast edge* that has been substantially modified by human activity (e.g. intertidal reclamation or quarrying).

Coastal Geomorphology

Sediment size was generally determined by a rapid qualitative judgement in the field, and approximates to the Udden-Wentworth grain-size scale⁶.

Mainly rock platform/boulders An *intertidal zone* dominated by wave washed, low angle rock outcrops and frequently scattered with wave washed *boulders* derived from local rock fall and / or mechanically removed blocks weathered *in situ*. This category includes both *wave cut platforms* and low *coast edge* shelving indicative of recent *marine transgression*.

Mainly shingle/cobbles/boulders An *intertidal zone* dominated by coarse beach material varying in grade from fine *pebbles* (granules >2mm dia.) to large water rolled *boulders*.

⁶ See Lewis, D. (1984) *Practical Sedimentology*. Hutchinson Ross, p.59.

- Mainly sand** An *intertidal zone* dominated by medium grade beach material (particles 0.006-2mm dia.)
- Marsh** A well vegetated area of fine sediments (<0.06mm dia.) occupying the upper tidal flat which undergoes frequent cycles of submergence and exposure. Occurs only in low energy coastal environments (e.g. estuaries) (Hansom 1988, 67). In the study area occasional deposits of medium grade sediments (0.06-2mm dia.) could also be classified as marsh (e.g. at the southern end of Achnahaird Bay). Also known as salt marsh.

2.2 Other Terms

- Boulders** Very coarse rock particles (>260mm dia.). These include both water rolled boulders that can be transported by high energy wave action (e.g. storm waves) and *in situ* wave washed boulders resulting from rock fall.
- Coast edge** A line defining the inland limit of wave activity along the coast. This zone varies in location and extent depending on local topography, tidal range, exposure to high energy wave activity and other geomorphological, marine and climatic factors. For the purposes of this study the coast edge is defined as the *coastal hinterland* less than 5m from *HWM*.
- Coastal Hinterland** The non-tidal land surface situated adjacent to the *coast edge*. Under normal conditions this zone is unaffected by coastal processes. This area is often restricted to the extent of a particular land form (e.g. raised beach), but may extend further inland depending on the scope of the study.
- Coastal Strip** A composite zone consisting of the *intertidal zone*, *coast edge* and the area of *coastal hinterland* less than 50m from *HWM*. Also known as coastal zone.
- Cobbles** Coarse water rolled rock particles (65-260mm dia.).
- Glacial Till** Any unsorted, glacially deposited sediments. Also known as drift, boulder clay or moraine.
- Intertidal Zone** The zone located between *LWM* and *HWM* that is subject to a continuous cycle of submergence and exposure associated with tidal influence.
- Marine Zone** The area of sea floor continuously covered by water under normal circumstances.
- Mud** Very fine grade sediments (<0.06mm dia.) characterised by alluvial silts and clays. A common constituent of the *intertidal zone* in estuarine environments.
- Pebbles** A generic term describing any form of medium-coarse beach material, consisting of shingle, cobbles and boulders (>2mm dia.). Equates to 'gravel' in the Udden-Wentworth grain-size scale⁷.
- Sand** Medium grade beach material, generally composed of small particles of rock, shell or coral (0.06-2mm dia.).
- Shingle** Moderately coarse water rolled rock particles (5-100mm dia.). Equates to 'pebble' and 'granule' in the Udden-Wentworth grain-size scale.
- Wave-cut platform** A flat rock platform situated in the *intertidal zone* which has been created through the mechanical effects of wave action.

3. EROSION CLASS

3.1 Categories

The following categories are loosely based on Valentin's classification of coasts⁸.

- Definitely accreting** A section of *coast edge* showing indications of active, continuous progradation through the accumulation of water and / or wind-borne sediments. A coastline in this state will be characterised by extensive offshore depositional features (e.g. sand bars and spits) and will have a documented history of land reclamation. Hinterland vegetation communities will be poorly established, with a predominance of saline tolerant grasses and

⁷ Also compares to both 'shingle' and 'gravel' in the British Standard grain-size scale (see Holmes, A. (1965) *Principles of Physical Geology*, Nelson, p. 811).

⁸ *Ibid.*, pp. 830-839. See also Valentin, H. (1952) 'Die Küste der Erde', *Petermanns Geographische Mitteilungen Ergänzungsheft* 246.

- shrubs. Note, for the purposes of this study this category also includes coasts effected by *marine emergence*, where identifiable.
- Accreting or stable** A section of *coast edge* showing indications of slow or intermittent progradation through the accumulation of water and / or wind-borne sediments or *marine emergence*. A coastline in this state will be characterised by minor depositional features (e.g. alluvial spits or deltas). Hinterland vegetation communities will be moderately well established, however there will only be limited development of slow growing species and woodland.
- Stable** A section of *coast edge* with no indications of either active erosion or progradation. Minor deposition or erosion may still occur under these conditions, however the net result will be inconsequential. For example, longshore drift may both deposit and remove sediments from a stretch of coastline resulting in an unchanged situation. A coastline in this state will be characterised by well developed vegetation communities. In the future the coast could either prograde or erode depending on geomorphological, marine, climatic or human factors.
- Eroding or stable** A section of *coast edge* showing indications of slow or intermittent regression, as determined by the presence of occasional erosional landforms (e.g. rock platforms & low cliffs) or *marine transgression* (e.g. the limited development of salt *marsh* or the drowning of cultural features). The erosion may be a result of *sub-aerial processes*, *wave action*, or a combination of influences. Hinterland vegetation communities will be well developed and visible erosion scars or cliffs may be well colonised by lichen or moss species. This category also includes coast sections with evidence of surficial erosion only (e.g. minor slumps and terracettes). The rate of regression is likely to be negligible under these circumstances.
- Definitely eroding** A section of *coast edge* showing indications of active retreat, as determined by the presence of frequent, well developed erosional landforms (e.g. wide *wave-cut platforms*, high cliffs, caves, geos, rockfalls and sea stacks) or *marine transgression* (e.g. the extensive development of salt *marsh* or the drowning of cultural landscapes). Hinterland vegetation communities will be well developed, however visible erosion scars or cliffs will be fresh, with little or no colonisation by lichen or moss. The rate of regression depends on the degree of exposure to high energy wave activity and bedrock resistance, and can vary considerably from place to place. In some situations the sub-aerial weathering of overlying drift deposits may be a more significant threat than the mechanical erosion of the bedrock.
- Both accreting and eroding** A section of coast edge showing active indications of both progradation and erosion, generally restricted to complex locations exposed to the influence of a variety of processes (e.g. long shore wave activity, fluvial deposition and / or aeolian processes). In specific reference to this study, this condition generally applied to estuarine environments, notably Achnahaird Bay, the Kanaird estuary and Loch Kirkaig. A coastline in this state will be characterised by either erosion and accretion occurring in tandem (e.g. coastal dune systems) or separately (e.g. variations in fluvial deposition / erosion along a tidal river stretch). The various effects of these processes have been described above (see other the categories in this section).
- Land below 10m** Any area of *coastal hinterland* situated below the 10m contour. This zone frequently extends outside the *coastal strip*.

3.2 Other Terms

- Eustatic sea-level change** Fluctuations in the height of relative sea level resulting from the addition/removal of water in the world's oceans often caused by the formation or melting of ice sheets. The resulting change causes *marine emergence* and *marine transgression*.
- HWM** Mean high water mark, as depicted on the current 1:10,000 OS map series. Under certain conditions (e.g. storm conditions) or along coasts with a high tidal range (e.g. narrow estuaries), tides may reach a much higher level.
- Isostatic sea-level change** Fluctuations in the height of relative sea level caused by the addition/removal of weight on a land surface through the growth or retreat of ice sheets. The resulting uplift or depression causes *marine emergence* and *marine transgression*. Also influenced to a lesser degree by water loading / unloading on ocean plates.

LWM Mean low water mark, as depicted on the current 1:10,000 OS map series. Under certain conditions tides may retreat to a much lower level, revealing a wider area of *marine zone* floor.

Marine emergence The emergence of a marine surface caused by a drop in relative sea level.

Marine transgression The drowning of an area of coastal hinterland caused by a rise in relative sea level. Also known as marine inundation.

Mechanical wave action The process causing coastal erosion resulting from the direct impact of waves and water-borne sediments (e.g. boulders).

Rate of regression The pace at which the coast edge retreats inland as a result of a combination of *mechanical wave action*, *water layer weathering* and *sub-aerial processes*. This process should be more properly term 'rate of retreat' and should not to be confused with marine regression, which relates to the combined effects of accretion and relative sea level fall.

Sub-aerial processes The normal processes of weathering that loosen & transport sediment to the base of a cliff or slope under the influence of gravity, irrespective of proximity to the coast. These processes include water runoff, freeze-thaw and the effects of plant root systems.

Tidal range Fluctuations in the height of tidal waves depending on seasonal, climatic and topographic factors. A high tidal range (e.g. in a shallow estuarine setting) can create difficulty in defining the position and extent of the *coast edge*.

Water layer weathering The process of erosion to the coast edge resulting from the continuous process of wetting and drying of exposed rock. This is a mechanical process that can affect cliff faces outside of the normal tidal range through the action of spray and salt crystallisation in cracks (Hansom 1988, 31).

4. BUILT HERITAGE AND ARCHAEOLOGY

4.1 Categories

Protected Ancient Monument Any scheduled monument and any monument under the ownership of the Secretary of State or a local authority by virtue of the *Ancient Monuments and Archaeological Areas Act 1979* [Section 28 (3)]. A scheduled monument is defined in this Act as any monument which is for the time being included in the Schedule [Section 1 (11)]. The latter is a schedule compiled and maintained by the Secretary of State (in such form as he thinks fit) for the purposes of this Act.

Listed Historic Building Under section 52(1) of the *Town and Country Planning (Scotland) Act 1972* the Secretary of State complies or approves lists of buildings of special architectural or historic interest. The term 'building' is defined in the Act as including any structure or erection, and any part of a building. Section 52(7) of the 1972 Act as amended by Schedule 9, Paragraph 13 to the *Housing and Planning Act 1986* provides that any object or structure fixed to a building or falls within the curtilage of the building and has formed part of the land since before 1st July 1948 shall be treated as a part of the building.

Other known ancient monument Any ancient monument or building not currently defined as a *Protected Ancient Monument* or *Listed Historic Building*.

Undesignated wreck Any *shipwreck* or *hulk* recorded in the study area. No shipwrecks or hulks recorded in the study area are currently classified as *Protected Ancient Monuments*.

Site complex A site comprising a number of separate, but associated elements that are described individually in Section 3 (Vol. 1) and Appendix 1 (Vol. 2).

Undetermined boundary The boundary of a *site complex* which is located outside the *coastal strip*, and currently undetermined by either field survey, documentary research or an examination of aerial photographs.

4.2 Site Types

Boat naust A hollow or shelter used to store or moor a boat at or above *HWM*, distributed throughout Northern Scotland, the Isles and Scandinavia. These structures usually constitute a simple U-shaped depression, although a variety of forms defined by revetment walls, boulder alignments and boat-shaped buildings constructed with well-built drystone walls have been recorded in the study area. This site type has its origins in the Late Norse Period, however

most boat nausts recorded in the study area are thought to date to the *Early Modern* Period, particularly the 18th & 19th centuries⁹.

- Broch** A type of circular stone fort distributed throughout Northern Scotland and the Isles dating to the *late prehistoric period*. Brochs generally measure up to 20m diameter with massive drystone walls (approx. 5m thick at the base) containing chambers, stairways and galleries (e.g. Mousa and Jarlshof in Shetland, or Dun Carloway on the Isle of Lewis). The open interior of these structures may contain lean-to structures, and brochs frequently formed a focus for either contemporary or later settlement. Brochs are considered a development of *duns* and most were probably built in the 1st-2nd centuries BC/AD.
- Cairn** A heap of stones resulting from a variety of activities, including construction of funerary monuments, field clearance and landscape delineation.
- Dun** Term used for stone-built fortified settlement in Northern and Western Scotland and Ireland, encompassing a variety of settlement types from individual structures, small ring and promontory forts to larger walled settlements. Structurally duns are characterised by very thick stone walls, sometimes timber laced (see *Vitrified forts*), defining a series of internal rooms or galleries, and associated annexes. Duns typically date to the Late Iron Age (*late prehistoric period*), though they are also known to be occupied into the medieval period (cf. Dun Lagaidh, Loch Broom).
- Field systems** A network of field boundaries and clearance heaps defining a cultivated area or pasture. Agriculture in the region probably originated the *late prehistoric period*, and traces of these field systems are observable, particularly in upland environments. Owing to the affects of subsequent land practices the majority of field system remains in the coastal study area probably date to early modern period. During the *pre-improvement* period, field systems comprised a series of cellular divisions defined by turf/stone dykes situated around settlements. It is possible this system originates in the *late prehistoric period*, however the exact connection is as yet undetermined. The survival of pre-improvement field systems is determined by the degree and distribution of post-improvement land practices, and elements can still be observed within the extent of modern settlements. This system was reorganised during the *post-improvement* period resulting in a more regular pattern defined by drystone walls. In some intensively occupied areas the use of stone walls was been discontinued earlier in the 20th century in favour of wire fencelines.
- Hulks** The hull of an unseaworthy or wrecked vessel, usually stripped of all fittings. These sites are generally situated at or near the coast edge. A hulk may be located in the *marine zone*, *intertidal zone* or on the *coastal hinterland* in the case of beached vessels or salvaged wrecks. All demonstrably abandoned, undocumented vessels recorded during the field survey have been classified as hulks for the purposes of this study. See also *shipwreck*.
- Hut Circle** A circular or oval depression, wall or ring of boulders defining the footings of a building usually dating to the *late prehistoric period*. This site type is common throughout highland Britain. The superstructure may have been constructed from a variety of perishable materials, including turf, peat, timber or thatch. These structures are often associated with upland *field systems*, however they are also situated in coastal environments.
- Kelp kiln** A hollow or construction used for the manufacture of kelp, an alkaline seaweed extract used by the soap and glass industries in the mid 18th and early 19th centuries. Contemporary accounts indicate that the kilns were long, low constructions of stone (Hunter 1976, 17), however it is probable that a variety of other structural types were in common usage, particularly circular, revetted depressions hollowed from storm bars close to the kelping grounds.
- Kelp storage pit** After the decline of kelp as a commercial commodity seaweed was used locally as a manure. The process involved initially rotting the kelp in open pits. Local information (see NB 91 SE 2) suggests that this activity was conducted in circular depressions defined by low stony banks and short associated drainage channels. Kelp manure was commonly used as component of *lazy bed cultivation rigs* (Macinnes 1988, 86).
- Lazy bed cultivation** Plots of narrow, parallel beds or rigs consisting of heaped soil and seaweed, used for the cultivation of potatoes, vegetables and other crops in environments marginal for agriculture. Lazy bed cultivation was an ongoing process throughout the post-medieval period

⁹ See Hunter, J. (1991) 'The Multi-Period Landscape', in Hanson, W. & Slater, E. (eds) *Scottish Archaeology: New Perceptions*, Aberdeen University Press, pp. 178-195.

- (ca. 16th-19th century) which ceased as an extensive activity as a result of the highland improvements. The practice was continued to a lesser degree bycrofting communities into the 20th century.
- Midden** Any deposit (heap or stratum) of domestic or kitchen refuse (e.g. shell, bone, ceramics, glass and other ecofacts or discarded artefacts). This definition applies to both the cultural debris and its surrounding soil matrix.
- Mill** Throughout Northern Scotland mills are characteristically water driven, consisting of a building or structure located adjacent to a permanent stream or watercourse, usually at the base of a steep bank or slope. Mills are frequently situated at the base of a raised beach adjacent to the coast edge, where water velocity is at its highest.. They take a variety of forms, including both horizontal and click mill types¹⁰. An artificial channel or lade diverts water from the stream into the structure to power the millstone. This technology has its origins in the Late Norse Period, however most mills recorded in the study area are thought to date to the *Early Modern* Period, particularly the 18th & 19th centuries.
- Peat cuttings** Trenches dug into peat deposits for the extraction of peat bricks for use as fuel, construction or soil material. The practice of peat extraction is likely to have a very wide time span, from the postulated use of peat as a building material in the prehistoric and medieval periods, to roofing material and fuel in the *early modern* period, and the recent commercial exploitation as a soil additive in horticulture. Given the sedimentary history of the region it is probable the majority of peat cuttings date to the 19th and 20th centuries. An associated feature are peat mounds, where the bricks have been stacked for drying.
- Shipwreck** The site of a vessel that has been accidentally wrecked as a result of climatic conditions, navigational errors or hostile action, or is the result of deliberate sinking. A shipwreck will generally only occur in the *marine* and *intertidal zones*, and can potentially be located in a considerable depth of water in offshore positions. This category defines both the physical remains of a wrecked vessel (e.g. *hulk*) and the underwater archaeological deposits associated with the wreck (e.g. scattered debris or cargo). Given that this study did not include *marine zone* survey, only known (documented) shipwrecks have been listed in the site gazetteer.
- Slipway** A ramp used for launching or beaching small boats. In the study area slipways generally consisted of passages cleared through boulder-strewn beaches defined by boulder revetments or sloping rock shelves. Slipways are commonly associated with individual or nests of *boat nausts*. *Post-improvement* slipways associated with harbours were constructed from mortared rubble or concrete.
- Township** For the purposes of this study a township is defined as a settlement complex consisting of associated or contemporaneous buildings set in a wider landscape context of cultivation plots, *field systems* and any other cultural features connected to the community (e.g. weirs and boat nausts).
- Vitrified fort** Term given to a *dun* or other late Iron Age fort where timber laced stone ramparts have been significantly vitrified through intense burning. This may have occurred as a result of either accidental or hostile action.

4.3 Periods

As a result of the general lack of substantive dating evidence, it has been difficult to ascribe a precise date to the construction or occupation in the case of most sites in the study area. Certain periods (e.g. the Middle Ages) are as yet inadequately represented in the archaeological record of the Highlands, and as a result cannot be considered a distinct period at this stage. Furthermore, there was insufficient evidence identified in the study area to conclusively identify occupation originating in earlier prehistory, that is the Mesolithic and Neolithic periods (ca. 4000-2000 BC) and consequently a separate category has not been used for this phase. This is not to say that Mesolithic or Neolithic sites do not exist in the study area, or that sites recorded in this study do not have phases contemporaneous with these periods.

¹⁰ See Hunter, J. (1991) 'The Multi-Period Landscape', in Hanson, W. & Slater, E. (eds) *Scottish Archaeology: New Perceptions*, Aberdeen University Press, pp. 178-195.

The following broad terms are based on the visual characteristics of each site, previous documentation and comparative data sets from other parts of Northern and Western Scotland:

Early modern Post-medieval period (*ca.* 1500-1900). No diagnostic features associated with the construction or occupation of the site are discernible during a rapid assessment of this nature. However, it is considered likely that sites in this category are post-medieval in origin, given their structural form and sedimentary context.

Late prehistoric Bronze to late Iron Age (*ca.* 2000 BC-500 AD), as demonstrated by the occurrence of diagnostic structural or artefactual elements, and/or previous scientific dating evidence.

Pre-improvement Post-medieval period prior to improvement (*ca.* 1500-1820 AD), as demonstrated by the occurrence of diagnostic structural (e.g. turf/stone dykes, lazy bed cultivation) or artefactual elements, previous scientific dating evidence and/or historical documentation.

Post-improvement Post-medieval period after improvement (*ca.* 1820-present day), as demonstrated by the occurrence of diagnostic structural (e.g. drystone field systems) or artefactual elements, previous scientific dating evidence and/or historical documentation.

Pre-modern Prehistoric to early post-medieval period (*ca.* 3000 BC-1500 AD). No diagnostic features associated with the construction or occupation of the site are discernible during a rapid assessment of this nature. However, it is considered likely that sites in this category are medieval or earlier in origin, given their structural form and sedimentary context.

4.4 Condition

Site condition was assessed from the perspective of overall site integrity, considering both structural preservation and archaeological potential. Sites with high structural preservation, but disturbed site context (e.g. occupied building complexes) were assigned correspondingly lower condition ratings. Sites with highly reduced structural remains, but intact site environment were assigned correspondingly higher condition ratings. Each site condition report was a preliminary assessment based solely on a brief visual inspection and review of previous documentation. Further studies using more detailed forms of investigation (e.g. systematic sub-surface testing and architectural recording) may alter these assessments considerably.

Good A site with well preserved structural remains and/or archaeological deposits. Generally there will be limited ground surface disturbance, structural alteration and modern development in the locale.

Fair A site with extant structural remains and/or potential for archaeological deposits. Generally there will be minor levels of ground surface disturbance, structural deterioration / alteration and modern development of the locale.

Poor A site with limited preservation of structural remains and high localised disturbance indicating poor or limited archaeological potential. Sites in this category may be exposed to chronic erosional problems affecting parts of the site, while other areas may be comparatively well preserved. Consequently inclusion of a site in this category does not necessarily indicate a lack of research potential. If the site is considered well represented in the region and of low significance, there is not necessarily any urgency to implement mitigation strategies.

4.5 Recommended Actions

Nil No immediate action is required until the next scheduled assessment is conducted. This action is recommended in situations where there is no apparent erosional or developmental threat to the site. Occasionally specific aspects of the site condition or active geomorphological processes are highlighted for later revaluation.

Monitor The site should be monitored on a regular basis to reassess its ongoing condition. This action is recommended in situations where either the site has overall low significance, or if the erosional threat is either unclear or slow.

Survey The site should be the subject of a detailed archaeological investigation, involving systematic survey, sub-surface testing and / or excavation. This action is recommended where sites of potentially high significance are affected by an immediate or chronic erosional threat of a serious nature.

APPENDIX 3:

**LIST OF SOURCES, ORGANISATIONS AND
INDIVIDUALS CONSULTED DURING THE STUDY**

The following is a comprehensive list of organisations, individuals and information sources consulted concerning various aspects of this study and associated research.

<i>Alldritt, D</i>	Department of Environmental & Evolutionary Biology, Glasgow University
<i>Archaeology (Dept. of), Glasgow University</i>	Theses
<i>Ashmore, P</i>	Senior Inspector, Coastal erosion, HS
<i>Atkinson, J</i>	MOLARS, Department of Archaeology Glasgow University
<i>Baird, B</i>	<i>Shipwrecks of the West of Scotland</i> , Nekton Books, 1994
<i>Baldwin, J</i>	<i>Peoples and Settlement in North West Ross</i> . Scottish Society for Northern Studies, 1994
<i>Banks, I</i>	MOLARS, Department of Archaeology Glasgow University
<i>Bangor-Jones, M</i>	Regional historian
<i>Bateson, D</i>	Numismatist, Hunterian Museum
<i>Batey, C</i>	Curator, Kelvingrove Museum
<i>British Geological Survey</i>	1:10,000 Drift Geology Map coverage (1912)
<i>Caldwell, D</i>	Curator, Dept. of History & Applied Art, NMAS
<i>Campbell, E</i>	Pottery specialist, Department of Archaeology Glasgow University
<i>Cowie, T</i>	NMAS
<i>Dagg, C</i>	Ullapool Field Club
<i>Dunwell, A</i>	CFA, Edinburgh University
<i>Dixon, P</i>	Director, Achiltibuie ALS, RCAHMS
<i>Ferguson, L</i>	Archival section, RCAHMS
<i>Fraser, I</i>	School of Scottish Studies, Edinburgh University
<i>Groom, D</i>	Scottish Institute of Maritime Studies
<i>Hall, D</i>	Inspector, Highland, HS
<i>Hanley, R</i>	Inverness Museum
<i>Hansom, J</i>	Department of Geography & Topographic Science, Glasgow University
<i>Haynes, N</i>	Inspector, Historic Buildings, HS
<i>Hingley, R</i>	Inspector, Highland, HS
<i>Historic Scotland</i>	Register of Listed Buildings Register of Scheduled Monuments
<i>Holmes, N</i>	Numismatist, NMAS
<i>Hunterian Museum</i>	Collections
<i>Inverness Museum</i>	Collections
<i>James, H</i>	Project Officer, GUARD
<i>Kelvingrove Museum</i>	Collections
<i>Kirby, J & R</i>	Informants, Achnahaird Sands
<i>Leask, C</i>	<i>Coastal Erosion Information abstracted from the Old & New Statistical Accounts</i> . Historic Scotland, 1996
<i>Lees, G</i>	Scottish Natural Heritage
<i>McCullagh, R</i>	AOC (Scotland) Ltd
<i>Maclean, W & M</i>	Informants, Achnahaird Sands
<i>Morris, C</i>	Department of Archaeology Glasgow University
<i>Morrison, A</i>	Department of Archaeology Glasgow University
<i>Newell, F</i>	Informant, Achnahaird Sands
<i>National Map Library of Scotland</i>	1st ed. OS map series (1875-81) Murdoch Mackenzie's coastal charts of NW Scotland (ca. 1750) Roy's Map of Scotland (1747-55)

	Various early maps & charts of NW Scotland (ca. 1540-1850)
<i>NMAS</i>	Collections
<i>Oxley, I</i>	Scottish Institute of Maritime Studies
<i>Paisley Museum</i>	Collections
<i>Photos-Jones, E</i>	Metallurgist, Department of Archaeology Glasgow University
<i>Poor, R</i>	Chairman of the Trustees, Ullapool Museum
<i>RCAHMS</i>	National Monuments Register of Scotland (NMRS)
	Architectural Photographic Record
	Shipwrecks database
	Aerial Photograph Library (APU)
<i>Rees, J</i>	Curator, Ullapool Museum
<i>Rex, P</i>	Owner, Badentarbat Estate
<i>Ross, F</i>	Local resident
<i>Saville, A</i>	Artefact Research Unit, NMAS
<i>Scottish History (Dept. of)</i>	
<i>Glasgow University</i>	Theses
<i>Scottish Natural Heritage</i>	Library
<i>Scottish Records Office (SRO)</i>	Cromartie Muniments (GD305)
	Peter May's Map of the Barony of Coigach (RHP85395)
	John Morrison's township plans of the Barony of Coigach
<i>Stone, J</i>	Department of Geography, Aberdeen University
<i>Tipping, R</i>	Department of Environmental Science, Stirling University
<i>Ullapool Field Club</i>	Local archaeology enthusiasts organisation
<i>Ullapool Museum</i>	Collections
<i>Webb, J</i>	Department of Geology, La Trobe University, Melbourne
<i>Will, B</i>	Pottery specialist, Department of Archaeology Glasgow University
<i>Wood, J</i>	Archaeologist, Highland Council

APPENDIX 4:
LIST OF PREVIOUSLY UNRECORDED SITES

APPENDIX 4: LIST OF PREVIOUSLY UNRECORDED SITES

The following list does not include structures or site complexes recorded as part of the RCAHMS Achiltibuie Afforestation Land Survey (ALS), or previous NMRS registrations which were reinspected as part of this survey. NMRS nos. in parentheses indicate elements of townships and farmsteads identified from the 1st edition O.S. 6½":1 mile map series, but not previously inspected in the field.

G.R	SITE NAME	SITE TYPE
NH 2124 8947	Morefield Cottage	Rectangular Building
NH 2123 8947	Ullapool River	Hulk
NH 2122 8948	Gob an t-Seid	Field systems
NH 2122 8948	Gob an t-Seid	Circular stone spreads
NH 2117 8952	Morefield	Hulks
NH 2104 8955	Morefield	Rectangular building, boat naust (NH 19 NW 5)
NH 2112 8956	Morefield	Boat naust, stone field boundaries, cairns (NH 19 NW 5)
NH 2108 8960	Cnoc na Moine	Quarry
NH 2102 8966	An Srathan	Rectangular building complex (NH 19 NW 8)
NH 2092 8974	Rubha Cadail	Lighthouse (operational)
NH 2097 8978	Meall Garbh	Peat cuttings
NH 2103 8979	Meall Beag	Peat cuttings
NH 2106 8977	Achana Bada Darach	Lazy bed cultivation plots
NH 2108 8979	Ardmair	Rectangular building complex
NH 2108 8982	Ardmair	Rectangular building complex (occupied)
NH 2108 8985	Ardmair	Rectangular buildings (occupied), boat naust, harbour wall
NH 2115 8987	Poll a' Chreada	Lazy bed cultivation plots, slipway
NH 2119 8992	Buaile Ghlas	Rectangular buildings, lazy bed cultivation plots (NH 19 NW 9)
NH 2120 8996	South Keanchulish	Rectangular building (occupied), slipways
NH 2119 8998	River Kanaid	Hulk
NC 2112 9003	River Kanaid	Lazy bed cultivation plots
NC 2123 9007	River Kanaid	Ford
NC 2119 9004	North Keanchulish	Rectangular building complex (occupied), enclosures
NH 2117 8999	River Kanaid	Boat naust, slipway
NH 2115 8995	Rubha Meallain Bhuidhe	Peat cuttings, lazy bed cultivation plots
NC 2113 9005	Camas Mór	Stone field boundaries
NC 2111 9009	Camas Beag	Fish trap
NC 2113 9009	Camas Beag	Lazy bed cultivation plots
NC 2099 9011	Creag Dearg	Lazy bed cultivation plots
NC 2095 9011	Creag an Airgid	Lazy bed cultivation plots
NC 2093 9012	Creag an Airgid	Rectangular buildings, lazy bed cultivation plots
NC 2082 9026	Geodha Mór	Ford
NC 2074 9029	Uisge Làidir	Historic midden and walling in cave
NC 2069 9031	Allt nan Cosiche	Circular sheilings
NC 2066 9032	Culnacraig	Peat cuttings, lazy bed cultivation plots
NC 2065 9031	Culnacraig	Rectangular building (fishermans bothy), slipway
NC 2065 9031	Culnacraig	Peat cuttings
NC 2052 9035	Achduart	Rectangular building, stone field boundaries, slipway (NC 00 SE 5 / NC 00 SE 7)
NC 2047 9036	Achduart	Rectangular buildings, peat cuttings, slipway, boat remains (NC 00 SW 5)
NC 2045 9035	Rubha Dubh Ard	Peat cuttings
NC 2043 9038	Rubha Dubh Ard	Trigonometric cairn (1st ed. O.S.)
NC 2043 9039	Rubha Dubh Ard	Lazy bed cultivation plots

G.R	SITE NAME	SITE TYPE
NC 2044 9042	Rubha Dubh Ard	Rectangular building, boat naust, slipway
NC 2045 9042	Rubha Dubh Ard	Peat cuttings
NC 2046 9044	Achnacarinan	Square structure
NC 2046 9047	Achnacarinan	Township, slipways, boat naust, hulk
NC 2040 9054	Acheninver	Sheep pen complex
NC 2039 9054	Acheninver	Boat naust
NC 2038 9059	Cnocna Moine	Boat naust, slipway
NC 2037 9060	Badenscallie Beach	Boat naust cluster, hulks
NC 2031 9070	Polglass	Structures (inc. boat naust), slipway
NC 2030 9080	Loch Poll an Dùnain	Footbridge
NC 2025 9068	Achlochan	Rectilinear structures
NC 2020 9071	Rubha Dùnan	Peat cuttings, lazy bed cultivation plots
NC 2024 9076	Achiltibuie	Boat naust, slipway, boat remains
NC 2023 9078	Achiltibuie	Track, historic midden deposits
NC 2022 9079	Achiltibuie	Boat naust cluster, slipway
NC 2022 9082	Achiltibuie	Subrectangular structure, rectilinear kelp kiln
NC 2019 9090	Port Allt a' Ruistéal	Rectangular structures converted to sheep pen complex
NC 2017 9092	Creag Ruadh	Peat cuttings
NC 2012 9097	Badentarbat	Sheep fold
NC 2010 9097	Badentarbat	Salmon fishing station
NC 2006 9095	Mol a' Bhlair	Lazy bed cultivation, stone field boundaries
NB 1997 9096	Polbain	Rectilinear structures
NB 1995 9097	Polbain	Rectilinear kelp kiln
NB 1991 9010	Dornie	Rectangular building complex (partially occupied)
NB 1988 9012	Dornie	Lazy bed cultivation plots, stone field boundaries
NB 1984 9101	Dornie	Slipway
NB 1985 9113	Old Dorney Bay	Extensive boat naust / slipway complex, with numerous hulks, lazy bed cultivation plots, stone field boundaries and clearance cairns
NB 1982 9113	Old Dorney Bay	Subrectangular structure, slipway
NB 1984 9125	Port an Alltain Duibh	Rough rectangular structure
NB 1985 9125	Alltan Dubh	Slipways, hulks, stone field boundaries, clearance cairns
NB 1978 9131	Alltan Dubh	Rectangular building complex (partially occupied)
NB 1975 9131	Alltan Dubh	Subcircular structure (poss. hut circle)
NB 1968 9139	Geodha na Glaic Bàine	Rough shelter, peat cutting
NB 1967 9142	Reiff	Circular kelp kiln (?), lazy bed cultivation plot
NB 1966 9142	Reiff	Rectilinear structure, stone revetment wall
NB 1967 9143	Reiff	Boat naust
NB 1966 9144	Reiff	Rectangular building (occupied)
NB 1964 9145	Loch of Reiff	Boat naust
NB 1965 9146	Loch of Reiff	Boat nausts, revetment wall
NB 1966 9147	Loch of Reiff	Rectangular buildings (occupied)
NB 1966 9150	Loch of Reiff	Boat nausts, slipway
NB 1964 9148	Loch of Reiff	Boat naust, revetment wall
NB 1964 9144	Loch of Reiff	Kelp storage pit
NB 1963 9144	Loch of Reiff	Circular kelp kilns
NB 1967 9157	Cnoc Airigh Giorsail	Subrectangular structure
NB 1967 9162	Caolas na Sgeire	Circular kelp kilns / bipartite shelter
NB 1969 9164	Glac Airigh Giorsail	Peat cuttings
NB 1971 9172	Rubha Mìn	Bipartite shelter
NB 1985 9177	Geodha na Ploytach Mór	Peat cuttings
NC 2016 9141	Achnahaird Bay	Boat house
NC 2018 9129	Allt a' Mhuilinn	'L-shaped' ditch alignment
NC 2022 9130	Allt Loch Raa	Weirs / fish traps
NC 2033 9146	Rubh' a' Choin	Circular kelp kilns
NC 2037 9143	Creag a' Choin Mhóir	Circular kelp kiln

G.R	SITE NAME	SITE TYPE
NC 2038 9141	Garvie Bay	Circular kelp kilns
NC 2039 9137	Loch Garvie	Circular kelp kiln, structure, weir
NC 2048 9135	Rubha Lag na Saille	Lazy bed cultivation plots, peat cuttings, slipway
NC 2054 9131	Camas a Bhothain	Rectangular buildings, bipartite subcircular structure, lazy bed cultivation plots, peat cuttings (NC 01 SE 7)
NC 2064 9139	Polly Bay	Peat cuttings
NC 2068 9041	Polly Bay	Rectangular building, weirs, lazy bed cultivation plots, trackway, footbridge (NC 01 SE 8)
NC 2068 9151	Lochan Sàl	Rectangular building (occupied), weir, slipway
NC 2070 9153	Lochan Sàl	Rectangular building, boat naust cluster, lazy bed cultivation plots
NC 2072 9161	Poll Loisgann	Lazy bed cultivation plots
NC 2073 9172	Rubh' a' Brochaire	Stone boundary wall, marker cairn
NC 2075 9172	Loch an Eisg-Brachaidh	Circular structures, cairns, slipways
NC 2076 9172	Loch an Eisg-Brachaidh	Rectangular structures, weirs (NC 01 NE 5)
NC 2075 9176	Polly More	Rectangular building, stone field boundary, footbridge, slipway
NC 2071 9179	Port na Bò Ruaidhe	Boat nausts, slipways, weirs
NC 2069 9177	Rubha an t-Salainn	Peat cuttings
NC 2065 9179	Cais-Bhaigh	Peat cuttings
NC 2068 9184	Cais-Bhaigh	Peat cuttings, lazy bed cultivation plots
NC 2069 9186	Cais-Bhaigh	Oyster farm
NC 2064 9193	Bealach Mór	Peat cuttings (?)
NC 2072 9195	Loch Kirkaig	Lazy bed cultivation plots
(NC 01 NE 2)	Inverkirkaig	Township
	NC 2079 9196	Rectangular building (occupied), boat naust (?)
	NC 2078 9199	Rectangular building (occupied)
	NC 2074 9198	Rectangular building (occupied), boat naust, enclosures, historic midden
	NC 2073 9199	Enclosures, trackway
NC 2065 9199	Loch Kirkaig	Lazy bed cultivation plots, peat cuttings
NC 2068 9199	Loch Kirkaig	Enclosure
NC 2065 9206	Loch Kirkaig	Standing stone
NC 2065 9207	Loch Kirkaig	Peat cuttings
NC 2063 9210	Poll na Creige Ruaidhe	Lazy bed cultivation plots
NC 2061 9213	Kirkaig Point	Rectangular building, quarry (?), stone boundary wall, peat cuttings
(NC 02 SE 19)	Badnaban	Township
	NC 2074 9210	Lazy bed cultivation plots, trackway, slipway, stone boundary walls
	NC 2078 9212	Weirs
	NC 2079 9212	Dam
	NC 2082 9211	Rectangular building (occupied), boat naust, slipway
NC 2083 9213	Strathan	Rectangular building (occupied), peat cuttings (NC 02 SE 18)
NC 2081 9217	Meallan a' Bhuic	Peat cuttings
NC 2084 9216	Rubha nam Fiadhag	Rectangular structure, boat nausts, slipway
NC 2086 9216	Lady Constance Bay	Stone field boundaries
NC 2090 9222	Aird Ghlas	Stone field boundary

